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(54) SOLID LUBRICATING BEARING

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(57) Abstract:

PURPOSE: To suppress the generation of abrasion powder from a rolling bearing by forming a solid lubricating film on at least one of the transfer surface of the bearing and a rolling body, mounting, by fitting, a holding member consisting of a polymer material having self-lubricating effect on the sliding part of a metal cage with the rolling body.

CONSTITUTION: Solid lubricating films 7, 8 onto which silver is adhered by ion plating are formed on each transfer surface of an outer ring 1 and an inner ring 2. A solid lubricating film 6 onto which silver is adhered by ion plating similarly to the transfer surfaces of the outer and inner rings 1, 2 is formed on the surface of a rolling body (ball) 3 held by a cage 4 rolled between the outer and inner rings 1, 2 along their transfer surfaces. A cylindrical holding member 5 made of polytetrafluoroethylene having a bore diameter larger than the diameter of the rolling body 3 is mounted, by fitting, on the hole for holding the rolling body 3 of the cage 4, which is manufactured by machining brass, to exhibit its self-lubricating effect.

